Amendment dated October 14, 2008 Reply to Office Action of May 14, 2008

**AMENDMENTS TO THE CLAIMS** 

1. (Currently Amended) A method of generating a text sentence in a target language

different in-from a source language, based on one or more words in the source language input as

keywords, the method comprising:

an input step in which the one or more keywords in the source language are input via an

input means without inputting a full text sentence in the source language, the one or more

keywords being a segment of the full text sentence in the source language;

a sentence pair extraction step in which a sentence pair extraction means extracts one or

more sentence pairs each including at least one of the keywords from a parallel corpus database

including partial correspondence information indicating correspondence between a word/phrase

in the source language and a word/phrase in the target language in each sentence pair;

a keyword-related phrase storage step in which a target-language keyword-related phrase

corresponding to each source-language keyword-related phrase is detected from the partial

correspondence information of each sentence pair and stored in the form of a keyword-related

phrase table in a storage means;

a text sentence candidate generation step in which a text candidate generation means

assumes dependency relationships among keyword-related phrases in the target language

described in the keyword-related phrase table and generates one or more target-language text

sentence candidates; and

an output step in which at least one text sentence candidate is output from an output

means corresponding to the full text sentence in the source language.

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2. (Currently Amended) The method A method of generating a text sentence in a target

language, according to claim 1, further comprising, after the sentence pair extraction step, a

keyword-related phrase presentation step in which if, in the sentence pair extraction step, two or

more sentence pairs are extracted for a keyword input in the input step and if two or more

different keyword-related phrases in the source language are detected from the partial

correspondence information, then the detected two or more keyword-related phrases in the

source language are presented to a user such that the user is allowed to select a keyword-related

phrase from the presented two or more keyword-related phrases,

wherein in the keyword-related phrase storage step, if the user selects a keyword-related

phrase from the presented two or more keyword-related phrases, a keyword-related phrase in the

target language corresponding to the selected keyword-related phrase in the source language is

described in the keyword-related phrase table.

3. (Currently Amended) The method A method of generating a text-sentence in a target

language according to claim 1 or 2, wherein

each time one keyword is input in the input step, the sentence pair extraction step and the

keyword-related phrase storage step are performed;

the method further comprising:

a co-occurrence word extraction step in which one or more co-occurrence

words which co-occur with the keyword in the sentence pair are extracted and the extracted one

or more co-occurrence words are described in a co-occurrence word table; and

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a co-occurrence word presentation step in which the one or more co-

occurrence words are presented to a user such that the user can select one or more co-occurrence

word from the co-occurrence words described in the co-occurrence word table,

and wherein if one or more co-occurrence words are selected by the user, the selected one

or more co-occurrence words are input as new keywords in the input step, and

the text sentence candidate generation step is performed after completion of inputting all

keywords.

4. (Currently Amended) The method A method of generating a text sentence in a target

language according to claim 1, wherein in the sentence pair extraction step, at the beginning of

the step, one or more morphemes are added to or subtracted from a keyword input in the input

step or a keyword input in the input step is replaced with a similar word.

5. (Currently Amended) The method A method of generating a text sentence in a target

language according to claim 1, wherein

a text sentence is generated for each of two or more target languages by performing the

sentence pair extraction step, the keyword-related phrase storage step, and the text sentence

candidate generation step for each combination of source and target languages; and

in the output step, text sentence candidates of respective two or more languages are

output.

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6. (Currently Amended) The method-of generating a text sentence in a target

language according to claim 1, wherein

in the text sentence candidate generation step,

the text candidate generation means assumes dependency relationships among keyword-

related phrases in the target language described in the keyword-related phrase table and

generates one or more target-language text sentence candidates; and

a source-language text candidate generation means assumes dependency relationships

among keyword-related phrases in the source language described in the keyword-related phrase

table and generates one or more source-language text sentence candidate,

in the output step, at least one set of text sentences in the source and target languages is

output from the output means.

7. (Currently Amended) The method of generating a text sentence in a target

language according to claim 1, further comprising, after the text sentence candidate generation

step, an evaluation step in which an evaluation means evaluates each text sentence candidate,

wherein

in the output step, at least one text sentence candidate is selected based on the evaluation

and the selected text sentence candidate is output.

8. (Currently Amended) An apparatus for generating a text sentence in a target language

different in-from a source language, based on one or more words in the source language input as

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keywords, the apparatus comprising:

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input apparatus for inputting the one or more keywords in the source language without

inputting a full text sentence in the source language, the one or more keywords being a segment

of the full text sentence in the source language;

a parallel corpus database including partial correspondence information indicating

correspondence between a word/phrase in the source language and a word/phrase in the target

language in each sentence pair;

a sentence pair extraction means for extracting one or more sentence pairs each including

at least one of the keywords from the parallel corpus database;

a keyword-related phrase storage means for detecting a target-language keyword-related

phrase corresponding to each source-language keyword-related phrase from the partial

correspondence information of each sentence pair and storing the detected target-language

keyword-related phrase in the form of a keyword-related phrase table;

a text candidate generation means that assumes dependency relationships among

keyword-related phrases in the target language described in the keyword-related phrase table and

generates one or more target-language text sentence candidates; and

an output means for outputting at least one text sentence candidate corresponding to the

full text sentence in the source language.

9. (Currently Amended) The apparatus An apparatus for generating a text-sentence in a

target language, according to claim 8, further comprising a source-language keyword-related

phrase candidate presentation means that determines, in a case in which two or more sentence

pairs corresponding to an input keyword have been extracted by the sentence pair extraction

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means, whether two or more different keyword-related phrases in the source language are

detected from the partial correspondence information associated with the two or more sentence

pairs and that, if so, presents to a user the detected two or more keyword-related phrases such

that the user is allowed to select a keyword-related phrase from the presented two or more

keyword-related phrases in the source language via the input means, wherein

if the user selects a keyword-related phrase from the presented two or more keyword-

related phrases, the keyword-related phrase storage means stores a keyword-related phrase in the

target language corresponding to the selected keyword-related phrase in the source language in

the keyword-related phrase table.

10. (Currently Amended) The apparatus An apparatus for generating a text sentence in a

target language, according to claim 8 or 9, wherein each time one keyword is input via the input

means, the sentence pair extraction means and the keyword-related phrase storage means

operate,

the apparatus further comprising:

a co-occurrence word extraction means for extracting one or more co-occurrence words

which co-occur with the keyword in the sentence pair and describing the extracted one or more

co-occurrence words in a co-occurrence word table; and

a co-occurrence word presentation means for presenting the one or more co-occurrence

words to a user such that the user can select one or more co-occurrence word from the co-

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occurrence words described in the co-occurrence word table,

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and wherein if one or more co-occurrence words are selected by the user via the input

means, the selected one or more co-occurrence words are input as new keywords, and

the text candidate generation means operates after completion of inputting all keywords.

11. (Currently Amended) The apparatus An apparatus for generating a text sentence in a

target language, according to claim 8, further comprising a keyword modification means for

modifying a keyword input via the input means by adding or subtracting one or more morphemes

to or from the keyword or replacing the keyword with a similar word, wherein

the sentence pair extraction means performs keyword modification using the keyword

modification means.

12. (Currently Amended) The apparatus An apparatus for generating a text sentence in a

target language; according to claim 8, wherein the parallel corpus database includes partial

correspondence information indicating correspondence between a word/phrase in the source

language and a word/phrase in the target language in each sentence pair;

the sentence pair extraction means, the keyword-related phrase storage means, and the

text candidate generation means perform processing for each combination of source and target

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languages; and

text sentence candidates of respective two or more languages are output from the output

means.

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13. (Currently Amended) The apparatus An apparatus for generating a text sentence in a

target language, according to claim 8, wherein the text candidate generation means assumes

dependency relationships among keyword-related phrases in the target language described in the

keyword-related phrase table and generates one or more target-language text sentence

candidates,

the apparatus further comprising source-language text candidate generation means that

assumes dependency relationships among keyword-related phrases in the source language

described in the keyword-related phrase table and generates one or more source-language text

candidate,

and wherein at least one set of text sentences in the source and target languages is output

from the output means.

14. (Currently Amended) The apparatus An apparatus for generating a text sentence in a

target language, according to claim 8, further comprising an evaluation means for evaluating the

one or more text sentence candidates.

15. (New) The method according to claim 1, wherein each time one keyword is input in

the input step, the sentence pair extraction step and the keyword-related phrase storage step are

performed, the method further comprising:

a co-occurrence word extraction step in which one or more co-occurrence words which

co-occur with the keyword in the sentence pair are extracted and the extracted one or more co-

occurrence words are described in a co-occurrence word table; and

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a co-occurrence word presentation step in which the one or more co-occurrence words

are presented to a user such that the user can select one or more co-occurrence word from the co-

occurrence words described in the co-occurrence word table,

wherein if one or more co-occurrence words are selected by the user, the selected one or

more co-occurrence words are input as new keywords in the input step, and the text sentence

candidate generation step is performed after completion of inputting all keywords,

wherein in the text sentence candidate generation step,

the text candidate generation means assumes dependency relationships among keyword-

related phrases in the target language described in the keyword-related phrase table and

generates one or more target-language text sentence candidates; and

a source-language text candidate generation means assumes dependency relationships

among keyword-related phrases in the source language described in the keyword-related phrase

table and generates one or more source-language text sentence candidate,

in the output step, at least one set of text sentences in the source and target languages is

output from the output means.

16. (New) The method according to claim 1, wherein each time one keyword is input in

the input step, the sentence pair extraction step and the keyword-related phrase storage step are

performed, the method further comprising:

a co-occurrence word extraction step in which one or more co-occurrence words which

co-occur with the keyword in the sentence pair are extracted and the extracted one or more co-

occurrence words are described in a co-occurrence word table; and

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a co-occurrence word presentation step in which the one or more co-occurrence words are presented to a user such that the user can select one or more co-occurrence word from the co-

occurrence words described in the co-occurrence word table,

wherein if one or more co-occurrence words are selected by the user, the selected one or

more co-occurrence words are input as new keywords in the input step,

the text sentence candidate generation step is performed after completion of inputting all

keywords, and

after the text sentence candidate generation step, an evaluation step in which an

evaluation means evaluates each text sentence candidate,

wherein in the output step, at least one text sentence candidate is selected based on the

evaluation and the selected text sentence candidate is output.

17. (New) The apparatus according to claim 8, wherein each time one keyword is input

via the input means, the sentence pair extraction means and the keyword-related phrase storage

means operate, the apparatus further comprising:

a co-occurrence word extraction means for extracting one or more co-occurrence words

which co-occur with the keyword in the sentence pair and describing the extracted one or more

co-occurrence words in a co-occurrence word table; and

a co-occurrence word presentation means for presenting the one or more co-occurrence

words to a user such that the user can select one or more co-occurrence word from the co-

occurrence words described in the co-occurrence word table,

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and wherein if one or more co-occurrence words are selected by the user via the input

means, the selected one or more co-occurrence words are input as new keywords, and

the text candidate generation means operates after completion of inputting all keywords,

wherein the text candidate generation means assumes dependency relationships among

keyword-related phrases in the target language described in the keyword-related phrase table and

generates one or more target-language text sentence candidates,

the apparatus further comprising source-language text candidate generation means that

assumes dependency relationships among keyword-related phrases in the source language

described in the keyword-related phrase table and generates one or more source-language text

candidate, and

wherein at least one set of text sentences in the source and target languages is output from

the output means.

18. (New) The apparatus according to claim 8, wherein each time one keyword is input

via the input means, the sentence pair extraction means and the keyword-related phrase storage

means operate, the apparatus further comprising:

a co-occurrence word extraction means for extracting one or more co-occurrence words

which co-occur with the keyword in the sentence pair and describing the extracted one or more

co-occurrence words in a co-occurrence word table; and

a co-occurrence word presentation means for presenting the one or more co-occurrence

words to a user such that the user can select one or more co-occurrence word from the co-

occurrence words described in the co-occurrence word table,

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wherein if one or more co-occurrence words are selected by the user via the input means, the selected one or more co-occurrence words are input as new keywords, and

the text candidate generation means operates after completion of inputting all keywords, an evaluation means for evaluating the one or more text sentence candidates.